Additional BackUp Information for Resolution on "In Community Solar"

October 26, 2021

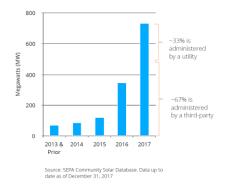
Commissioner McVoy

Overview

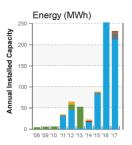
The **In Community Solar** program proposed here grew out of City Commission discussions at the September 28, 2021 Electric Utility meeting. It includes four components based on increasingly adopted, industry best practices, namely, solar installations visible to the community, a community solar option for residents and businesses, "Battery Energy Storage Systems" (BESS), and web/app-based real-time digital outreach. Implementation of an **In Community Solar** program, combined with an Energy Efficiency program and with our purchase power agreements with the Florida Municipal Solar Project can help give our utility--and our city--national recognition. For example, since 2019 the American Public Power Association (APPA) has awarded 94 public utilities the designation "Smart Energy Provider." The SEP program recognizes utilities that "show commitment to and proficiency in energy efficiency, distributed generation, renewable energy, and environmental initiatives." The APPA created SEP "to provide national recognition of utility efforts to incorporate energy efficiencies and sustainability while providing affordable electric service." (https://www.publicpower.org/smart-energy-provider)

Another national industry organization, the Smart Electric Power Alliance (SEPA;

<u>https://sepapower.org/</u>) has an extensive library of technical information available to member utilities. SEPA defines community solar (also called "shared solar") as "voluntary business models where multiple subscribers pay for a share of a specified offsite solar project and receive credit on their electricity bill for their portion of power produced." SEPA notes that beyond its environmental benefits, community solar "provides local economic development, job training opportunities, and access to solar for low-tomoderate income customers." Adoption of community solar is growing exponentially:

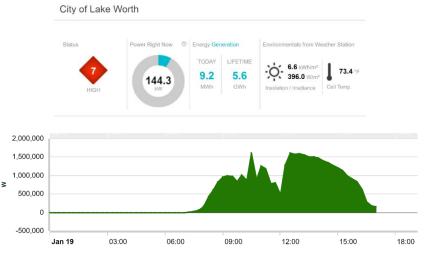


Regarding battery storage, the third component of the proposed **In Community Solar** program, the National Renewable Energy Laboratory (<u>https://www.nrel.gov/</u>) notes that "as prices for BESS continue to decline (70% from 2010-2016, and projected to decline further) and the need for system flexibility increases with wind and solar deployment, more policymakers, regulators, and utilities are seeking to develop policies to jump-start BESS deployment." Of particular relevance to Lake Worth Beach, NREL also notes that "distribution-level BESS systems can also provide local power quality services and support improved resilience during extreme weather events." Similarly to community solar, adoption of battery storage around the country has been growing exponentially:

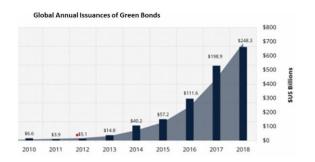


Data source: U.S. Energy Information Administration, Form EIA-860, Annual Electric Generator Report

The digital outreach component of the **In Community Solar** program can be a low-cost, high-return way to involve Lake Worth Beach residents, translating the visible solar panels on community properties into actual energy in their homes. If explanatory information and real-time graphs are presented for the battery systems and for all solar locations (the existing field at landfill, the large ones in the center of the state and the visible ones on community buildings and properties), the digital outreach can help again recreate the community feeling mentioned by resident Wes Blackman when, "having its own electricity was a source of pride." **In Community Solar** can build on the digital presentations we already have:



Finally, efforts such as the **In Community Solar** program, along with an Energy Efficiency/Conservation program, and combined with our substantial solar energy purchase power agreements will very likely, in addition to bringing national recognition to our utility and city, increase our attractiveness for the green bond market, an economic sector that is growing dramatically:



"Hundreds of billions of dollars in untapped new money can finance the U.S. power system's transition away from legacy fossil assets to renewables and distributed generation." <u>https://www.utilitydive.com/news/new-money-green-banks-and-green-bonds-are-bringing-billions-to-</u> <u>utilities-f/567483/</u>